

STATOR, DYNAMOELECTRIC MACHINE, AND METHODS FOR FABRICATING SAME

Abstract of Disclosure

A dynamoelectric machine includes a stator having teeth fabricated from a non-magnetic material and containing at least one embedded conductor. The teeth are unitary with a back portion that is mounted to a stator back iron. Permeance variations induced by a stator winding mounted on the non-magnetic stator teeth are low which facilitates a reduction of motor noise. Specifically, since the non-magnetic teeth reduce production of permeance variations, changes in air gap forces between the rotor and the stator are decreased.

Figures

Figure 1: A diagram illustrating the relationship between the variables x and y . The horizontal axis is labeled x and the vertical axis is labeled y . A curve is plotted in the first quadrant, starting from the origin and increasing as x increases. The curve is concave down, indicating that the rate of increase of y with respect to x is decreasing. The curve is labeled with the equation $y = \sqrt{x}$.